



## Department of Energy

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**3984**

15 NOV 2001

Mr. James A. Saric  
United States Environmental Protection Agency  
Region V, SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0119-02

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

#### **TRANSMITTAL OF RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS AND THE REVISED 2001 FERNALD SITE CRAYFISH SURVEY AT PADDYS RUN**

Reference: Letter, T. Schneider to J. Reising, "Fernald Site Crayfish Survey at Paddys Run," dated October 31, 2001

Enclosed for your approval are responses to the Ohio Environmental Protection Agency comments and the revised August 29, 2001 Fernald Site Crayfish Survey at Paddys Run by Ohio State University. This report was revised to include comment responses per the reference above. This effort is required every three years, pursuant to the Integrated Environmental Monitoring Plan. The survey was conducted one year early due to remediation activities in 2001 adjacent to Paddys Run. The survey assesses the population of the state-threatened Sloan's crayfish (*Orconectes sloanii*) in the upstream on property reach of Paddys Run.

The relative abundance of the Sloan's crayfish is compared against *Orconectes rusticus*, the only other species of crayfish residing in Paddys Run. Data reveals that the Sloan's crayfish is still found in large numbers within Paddys Run. The relative abundance to *Orconectes rusticus* is declining when compared to previous years; however, this decline is not attributed to Fernald Environmental Management Project activities. *Orconectes rusticus* is a larger, more aggressive crayfish species, and it generally out-competes Sloan's crayfish over time.

Mr. James A. Saric  
Mr. Tom Schneider

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15 NOV 2001

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If you have any questions or need further information, please contact Pete Yerace at (513) 648-3161.

Sincerely,



Johnny W. Reising  
Fernald Remedial Action  
Project Manager

FEMP:Yerace

Enclosures: As Stated

cc w/enclosures:

R. J. Janke, OH/FEMP  
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P. Yerace, OH/FEMP  
G. Jablonowski, USEPA  
B. Kurey, USFWS  
T. Schneider, OEPA-Dayton (three copies of enclosures)  
F. Hodge, Tetra Tech  
D. Sarno, FCAB  
J. Homer, Fluor Fernald, Inc./MS65-2  
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cc w/o enclosures:

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**RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS  
ON THE FERNALD SITE CRAYFISH SURVEY AT PADDYS RUN  
CONDUCTED ON AUGUST 29, 2001  
(20900-RP-0015, REVISION 0)**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT**

**SPECIFIC COMMENTS**

Commenting Organization: Ohio EPA  
Section #: Results and Discussion Pg. #: 1 Line #: NA Commentator: DSW  
Original Comment #: 1 Code: E

Comment: The sentences "More species were collected in 2001 than in 1996 and 1999 combined (Table 2). The fourfold increase in species from 1999 to 2001 ..." should read "More individuals were collected in 2001 than in 1996 and 1999 combined (Table 2). The fourfold increase in individuals from 1999 to 2001 ..." as only the two species of crayfish were collected in all years.

Response: Agree.

Action: Revise text accordingly.

Commenting Organization: Ohio EPA  
Section #: Table 2 Pg. #: 4 Line #: NA Commentator: DSW  
Original Comment #: 2 Code: C

Comment: The numbers of individuals of *Orconectes sloanii* in 2001 at 3, 2, and 1 should be 76, 26, and 41, rather than 3, 2, and 1 respectively.

Response: Agree.

Action: Revise table accordingly.

Commenting Organization: Ohio EPA  
Section #: General Pg. #: NA Line #: NA Commentator: DSW  
Original Comment #: 3 Code: C

Comment: Although Dr. St. John's grim prediction that eventually the introduced *Orconectes rusticus* may extirpate *Orconectes sloanii* from Paddys Run in the vicinity of the FEMP may be true, I believe it to remain a priority of the site to refrain from any practice or action that may accelerate that condition. We also suggest that, when counting the crayfish during the survey, that the *Orconectes rusticus* be placed in a separate container and transported to the Great Miami River to be released. Although Dr. St. John's prediction may still come to pass, at least the population of *Orconectes rusticus* can be somewhat held in check during remediation by this process and not given further advantage by perturbations during remediation. This activity is essentially cost free and potentially significantly advantageous for *Orconectes sloanii* during remediation.

Response: Agree.

Action: *Orconectes rusticus* collected during the next survey will be relocated to the Great Miami River.